



NFWF

EasyGrantsID: 83947

National Fish and Wildlife Foundation – National Coastal Resilience Fund 2024, Pre-Proposal

Title: Deschutes Estuary Restoration and 5th Ave Dam Removal

Organization: Washington Department of Enterprise Services

Grant Request Information

Title of Project

Deschutes Estuary Restoration and 5th Ave Dam Removal

Project Description

Washington DES, in partnership with the Squaxin Island Tribe and the City of Olympia, is implementing the Deschutes Estuary Restoration and Dam Removal project to restore salmon habitat, reduce flood risk, and increase resilience to sea level rise in downtown Olympia. A Sea Level Rise Collaborative identified the Deschutes Estuary Restoration as a critical action to accomplishing the Olympia Sea Level Rise Response Plan. It also identified that constructing a berm along the eastern edge of the estuary restoration project area would be needed to protect downtown from the full impacts of sea level rise. The berm and the estuary restoration are currently separate projects. This funding request would expand the project scope to integrate the berm concept into the overall restoration design with a living shoreline. Doing so would center a natural capital solution to reduce flood risk, adapt to sea level rise, and restore access to cultural resources important to the Squaxin Island Tribe.

Abstract

Sea level rise and increased precipitation intensity is expected to cause significant flooding in downtown Olympia. Recognizing this growing risk to critical infrastructure and public safety, in 2018 the City of Olympia initiated a planning effort with regional partners to develop the Olympia Sea Level Rise (SLR) Response Plan, which identifies actions to mitigate and adapt to sea level rise. The plan recognizes that Olympia's vulnerability is exacerbated by a dam at the mouth of the Deschutes River. After 30 years of public deliberation about the dam, in 2023 the Washington Department of Enterprise Services DES initiated the Deschutes Estuary Restoration and Dam Removal project. The project would remove the dam, which would restore 250 acres of estuary and reduce maximum flood levels across downtown by approximately 1 foot. The project team is currently evaluating opportunities to align dam removal and estuary restoration construction with other flood risk reduction measures identified in the 2018 SLR Plan. One of these, a berm between downtown and the estuary, could be a design element of the estuary restoration to further increase flood retention capacity and protect downtown Olympia from flooding. This berm is not currently part of the project. This grant would allow DES to formally merge the two projects through final design. This would cost-effectively support design of the berm as a cohesive element of the estuary landscape as it transitions into the urban environment.

Project Location Description

The estuary restoration project site is located at the mouth of the Deschutes River and extends upriver to Tumwater Falls at approximately river mile 2. The berm would be located along the eastern edge of the restoration project site in a state-owned public park on the State Capitol Campus.

Total Amount Requested

\$1,000,000.00

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Matching Contributions Proposed \$50,700,000.00

Proposed Grant Period 12/01/2024 - 12/31/2026

Organization Washington Department of Enterprise Services

Organization Type State or Local Government

City, State, Country ”

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Position/Title

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Additional Contacts

Role	Name
Principal	Ann Larson



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Matching Contributions

Matching Contribution Amount:	\$7,000,000.00
Type:	In-kind
Status:	Received
Source:	CCA Appropriation
Source Type:	Non-Federal
Description:	\$7 million the Washington Legislature dedicated to the project for the 2023–2025 biennium, which will fund design and permitting activities through June 2024.

Matching Contribution Amount:	\$2,000,000.00
Type:	In-kind
Status:	Pledged
Source:	CCA Appropriation
Source Type:	Non-Federal
Description:	CCA legislative appropriation for blue carbon sequestration 2025-2027

Matching Contribution Amount:	\$11,900,000.00
Type:	Cash
Status:	Application Submitted
Source:	NOAA
Source Type:	Federal
Description:	Restoring Tribal Fish Passage through Barrier Removal Grant - Funding request is for \$11.9 million to support design, permitting and initial stages of construction from 2024–2028

Matching Contribution Amount:	\$24,800,000.00
Type:	Cash
Status:	Application Submitted
Source:	NOAA
Source Type:	Federal
Description:	Transformational Habitat Restoration and Coastal Resilience - This funding



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	request is for \$24.8 million to support design, permitting and initial stages of construction from 2024–2028
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Matching Contribution Amount:	\$5,000,000.00
Type:	Cash
Status:	Application Submitted
Source:	USDOT - RAISE
Source Type:	Federal
Description:	This funding request is for about \$5 million to support design of the 5th Avenue Bridge, and related planning activities including traffic flow modeling, benefit-cost analysis, and stakeholder outreach

Total Amount of Matching Contributions:	\$50,700,000.00
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The following pages contain the uploaded documents, in the order shown below, as provided by the applicant:

Upload Type	File Name	Uploaded By	Uploaded Date
NCRF Pre Proposal Narrative 2024	2024_NFWF_NCRF_Pre-Proposal Narrative_DES.pdf	Milligan, Alicia	04/10/2024
Project Site Map	01_Site Location of the 5th Avenue Dam Removal and Deschutes Estuary Restoration Project.pdf	Milligan, Alicia	04/10/2024

The following uploads do not have the same headers and footers as the previous sections of this document in order to preserve the integrity of the actual files uploaded.



NCRF *PRE-PROPOSAL* – Narrative

PART I – PROJECT OVERVIEW

1. In the coming decades, sea level rise and increased precipitation intensity is expected to cause significant flooding in downtown Olympia. Olympia is especially vulnerable to the effects of sea level rise because of its location at the southern end of Puget Sound, where tidal ranges are the greatest; because downtown is adjacent to the mouth of the Deschutes River; and because the City is built on fill and is subsiding at a rate of 1-inch per decade. Olympia's vulnerability is exacerbated by the 5th Avenue Dam (dam) at the mouth of the Deschutes River, which the State constructed in 1951 to create an architectural feature for the Washington State Capitol Campus. Today, the dam increases flooding across downtown Olympia. The Deschutes Estuary Restoration Project would remove the 5th Avenue Dam, which would reduce maximum flood levels across downtown by approximately 1 foot. The project would also restore 260-acres of historic estuarine habitat that is an area of cultural and spiritual significance for the Squaxin Island Tribe and important Tribal fisheries for Chinook and Coho salmon. The dam would be replaced by a new bridge to maintain the east and west connection across Olympia that is important to linking historically disadvantaged populations in west Olympia with businesses, services, and emergency response resources located in downtown Olympia. As flood risk increases with sea level rise, this connection becomes more vulnerable to disruption, putting these populations at greater risk.

2. Recognizing the growing risk of sea level rise and flooding in downtown Olympia, the City of Olympia, the Port of Olympia, and LOTT Clean Water Alliance initiated a joint planning effort in 2018 to develop the Olympia Sea Level Rise Response Plan ([linked here](#)). The Plan provides comprehensive strategies to minimize flooding, protect critical infrastructure and valued community assets. In 2021, the partners, joined by the Department of Enterprise Services (DES) and the Squaxin Island Tribe (Tribe) formed the Olympia Sea Level Rise (SLR) Response Collaborative (Collaborative) to coordinate and implement sea level rise adaptation as strategized in the Plan.

Concurrent with this effort, DES led planning efforts to evaluate long-term management options for Capitol Lake, which included a dam removal and estuary restoration alternative. In 2022 DES selected estuary restoration as the preferred alternative and DES initiated the design process of the Deschutes Estuary Restoration project (project) in fall of 2023. The project team is currently evaluating opportunities to align dam removal and estuary restoration construction with other flood risk reduction measures identified in the 2018 SLR Plan. One of these, a berm in Heritage Park, could be a design element of the estuary restoration to further increase flood retention capacity and protect downtown Olympia from flooding. This berm is not currently part of the project. **This grant would allow DES to formally merge the two projects and support design of the berm as a cohesive element of the estuary landscape as it transitions into the urban environment.**

3. N/A; 4. N/A

5. The project would restore 260 acres of estuary, improving water quality, increasing flood storage volume, and softening the shoreline. Restoration would also benefit Chinook and Coho salmon, which are important Tribal fisheries and critical prey for the Endangered Species Act-listed Southern Resident Killer Whale. Expanding the project to integrate the additional flood storage infrastructure where the project meets downtown and intersects with an important public park, as called for in the SLR Plan, would provide additional opportunities to expand the living shoreline and design resilient habitat features that would adapt to sea level rise.

6. As far as the project team is aware, this project would represent the largest estuary restoration within the heart of an urban area in the U.S. The eastern shoreline of the project area borders a state-managed park that transitions into downtown Olympia. This eastern shoreline is one of three primary locations of inundation during



City-wide flood events. If funded, the project would design a living shoreline in this location in place of the existing concrete seawall and would elevate the habitat features above projected flood levels.

7. This grant would expand the Deschutes Estuary Restoration design and permitting process to include the living shoreline/berm. The expected deliverable would be final design and permitting for the berm in 2026.

8. This project provides an opportunity to develop and refine best practices for estuary restoration within an urban environment. Restoration objectives include designing shorelines that can adapt to rising sea levels and be forward compatible with projected flood elevations as they increase over time (i.e., the natural berm would have long-term utility because elevation can be added; an entirely new solution is not needed).

9. DES is designing the project in collaboration with the Tribe and the City of Olympia. An extensive engagement process informed the EIS which resulted in selection of the Estuary Alternative. DES is broadening engagement to ensure meaningful input from underrepresented communities. Project benefits will be distributed broadly, with flood resilience and improved multi-modal transportation and access to green spaces to historically disadvantaged communities (see Question 11). The Tribe would enjoy restored access to usual and accustomed fishing areas within the estuary and other culturally important resources.

10. DES is collaborating with the **Squaxin Island Tribe** on restoration design, and the Tribe will participate in long-term ecosystem management. DES is collaborating with the **City of Olympia** on bridge design and integrating project design with its sea level rise response plan. The Washington State Departments of Fish and Wildlife, and Natural Resources are also design partners and will have long-term management responsibilities.

11. Please see the table below for demographic information of the communities being served by this project.

Community Census Block Groups	Race/Ethnicity*	Poverty Rate*	Low Income %*	Annualized Unemployment Rate*
	W=White; B=Black/African American; AIAN=American Indian, Alaska Native; A=Asian; O=Other; 2MR=Two or More Races; H/L=Hispanic or Latino			
530670101	W: 83%; B: 3%; AIAN: 0%; A: 3%; O:0%; 2MR: 11% H/L: 5%	10.5%	29%	5.3%
530670106	W: 71%; B: 3%; AIAN: 0%; A: 11%; O: 1%; 2MR: 14%; H/L: 13%	18.5%	39%	8.9%
5306701052	W: 72%; B: 4%; AIAN: 2%; A: 9%; O: 1%; 2MR: 11%; H/L: 13%	27.2%	42%	3.0%

*Inputs are percentages. Source: U.S. Census Bureau, American Community Survey, 2018 - 2022 ACS 5-Year Estimates, Table B02001 'Race', Table B03003 'Hispanic or Latino Origin', S1701 'Poverty Status in the Past 12 Months', C17002 'Ratio of Income to Poverty Level in the Past 12 Months', S2301B10 'Employment Status.'

12. Downtown Olympia, where the project is located, is the social, cultural, historic, and economic core of the city and wider region. The downtown area contains vital infrastructure that serves the entire region including Budd Inlet Wastewater Treatment Plant, the Port of Olympia, and emergency vehicle corridors between west and east Olympia. The Olympia Farmers Market, Heritage Park, and Percival Landing are also located downtown. Removing the dam and restoring the estuary would mitigate some of this flooding, avoiding recurrent property damage and disruption and reducing the cost of investments the city would otherwise need to make. By expanding the project to include the Heritage Park berm, Olympia would enjoy greater flood resilience.

13. More than 95% of Puget Sound's nearshore habitat is gone and restoring it is key to Chinook salmon recovery. Restoring 260 acres of estuary would advance this critical regional priority by providing scarce rearing habitat for juvenile fish. Enhancing Chinook runs throughout Puget Sound is a key strategy for recovery of the Southern Resident killer whale. Coho salmon natal to the Deschutes River would benefit from dam removal by reducing predation, strengthening the food web, and providing a more gradual transition between fresh and saltwater conditions. Living shorelines with varied habitat types throughout the estuary will increase the biodiversity and reintroduce native plant and animal resources culturally important to the Squaxin Island Tribe.

14. None; 15. N/A; 16. NO

Site Location of the 5th Avenue Dam Removal and Deschutes Estuary Restoration Project

